

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No
PCT/GB2004/002698

International filing date (day/month/year)
23.06.2004

Priority date (day/month/year)
25.06.2003

International Patent Classification (IPC) or both national classification and IPC
G21F5/14

Applicant
BRITISH NUCLEAR FUELS PLC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2 FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3 For further details, see notes to Form PCT/ISA/220

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2004/002698

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2004/002698

Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	3-7,12,16,19-22,25,26
	No: Claims	1,2,8-11,13-15,17,18,23,24,27
Inventive step (IS)	Yes: Claims	12,19-22,25,26
	No: Claims	1-11,13-18,23,24,27
Industrial applicability (IA)	Yes: Claims	1-27
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

D1: Patent Abstracts of Japan, vol. 017, no. 705 (M-1534) - 22 December 1993
-& JP 5245781 A (Mitsubishi Heavy Ind. Ltd) - 24 September 1993

D2: Patent Abstracts of Japan, vol. 1999, no. 01 - 29 January 1999
-& JP 10274697 A (Ishikawajima Harima Heavy Ind. Co. Ltd) - 13 October 1998

D3: Patent Abstracts of Japan, vol. 1996, no. 11 - 29 November 1996
-& JP 8192923 A (NGK Insulators Ltd) - 30 July 1996

2. **Independent claim 1**

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT. The document D1 indeed discloses (the references in parentheses applying to this document, see especially figures 3 und 4):

a recovery device for use in a confined space (1), said device comprising two gripping means (6) and extension means (*winch mechanism 22,23,39*), said gripping means being comprised in adjacent members (*manipulator arms 4*).

All the features of claim 1 are therefore known from D1.

The document D2 also discloses all the features of claim 1, the hook (31) being considered as first gripping means, and the gripper carried by the manipulator arm (3) being considered as second gripping means.

3. **Independent claim 27**

The reasoning of paragraph 2 above applies, *mutatis mutandis*, to the

subject-matter of the use claim 27, which therefore also lacks novelty in the sense of Article 33(2) PCT.

4. Dependent claims 2 to 11, 13 to 18, 23 and 24

The dependent claims 2, 8 to 11, 13 to 18, 23, 24 and 27 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step. The applicant is invited to refer to the following information in the prior art:

for claim 2: see D1, figure 4, grippers (6)

for claims 3 to 7: the recovery device disclosed in D1 is provided with a cylindrical recess (see figures 3 and 4) adapted to encompass a waste container (12). The subject-matter of claim 3 differs from this recovery device in that this recess is provided with gripping means. This allows to firmly support a waste container from underneath if it is really heavy.

D3 discloses a device for carrying a waste container comprising a sleeve adapted to encompass the container and a plurality of fingers (9) which can engage with the lower part of the container. This device presents consequently the same advantage as the recovery device of the application.

It would be obvious for the skilled person to adapt such fingers at the lower part of the cylindrical recess in D1, thus arriving to a recovery device according to the claims 3 to 7. The subject-matter of these claims therefore lacks inventive step.

for claims 8-11 & 13-15: see D1, figure 4, two adjacent manipulator arms (4), rotatably mounted on device (2), carry grippers (6)

for claim 16: it is mentioned in the description of D2 (paragraph 13) that the recovery device comprises a cutter for opening the container (P)

for claims 17 & 18: see D1, figure 4, container (12) is used to collect debris
collected by gripping means

for claims 23 & 24: see D1, figure 3, wires (40) and winch mechanism (22,23,39)

5. Dependent claims 12, 19 to 22, 25 and 26

The combination of the features of dependent claims 12, 19 to 22 and 25 seems to be neither known from, nor rendered obvious by the available prior art.

6. Industrial applicability

The claims 1 to 27 satisfy the criteria of industrial applicability as defined for the purposes of the international preliminary examination in Article 33(4) PCT.